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Provisional specification in connection with Application No. PS 0876 for a
patent by ONG, YONG KIN (MICHAEL) as filed on 04 March 2002.

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PROVISIONAL SPECIFICATION

Applicant(s):

ONG, YONG KIN (MICHAEL)

Invention Title:

ELECTRONIC FUND TRANSFER SYSTEM

The invention is described in the following statement:

ELECTRONIC TRANSFER SYSTEM

The present invention is an electronic transfer system and method for conducting on-line purchases.

5

Present e-commerce transaction systems do not provide many consumers with sufficient confidence to shop on-line.

Consumers are concerned about security issues in using their credit card or debit card to make purchases. They
10 are concerned that should their credit card information fall into the wrong hands, credit card owners may be liable for transactions not conducted by them.

The electronic fund transfer method described in the
15 specification accompanying the international application PCT/AU01/00137 provides a process that adds security to the transaction.

The present invention relates to further improvements on
20 this method.

In accordance with the present invention there is provided a method of conducting an on-line transaction including the steps of:

25 providing a transaction manager;
generating a single use transaction identification;
the transaction manager relating the transaction identification to banking information of a registered user;

30 providing the registered user with the transaction identification;

the user requesting to purchase a product or service having a value from a merchant, the purchase request including providing the transaction identification to the
35 merchant;

the merchant sending a payment request to the transaction manager for a fund transfer of the value from

the user to the merchant, the payment request including the transaction identification and the value;

the transaction manager checking the validity of the transaction identification and disabling re-use of the
5 transaction identification;

checking whether the transaction identification is valid and if it is valid, sending an EFT request to a financial institution to transfer the value in funds from the user to the merchant, the EFT request including the
10 banking information;

checking whether sufficient funds are present in the user's bank account and if sufficient funds are present, the financial institution performing the transfer according to the banking information; and

15 the transaction manager receiving confirmation of the transfer from the financial institution and sending the confirmation to the merchant.

Preferably the transaction manager generates the
20 transaction identification. In one embodiment the transaction identification is a random number. In another embodiment the transaction identifier is generated using a formula. In yet another embodiment the transaction identification is generated using a random number and a
25 formula.

Preferably the banking information related to the transaction identification includes a credit card or debit card number, a card expiry date and a cardholder name.
30 Alternatively the banking information includes a bank account number. It may additionally include bank account type and bank account holder information. Preferably the transaction identification is related to transaction manager information in addition to the banking
35 information. Preferably the transaction manager information includes a transaction manager account number, and preferably a transaction manager account expiry date,

and a transaction manager account password. Preferably the transaction manager information further includes a transaction manager account alias. Preferably each relationship of a transaction identification to the banking information further includes a transaction manager account number or transaction account alias, transaction limit, and a transaction limit override password.

Preferably the registered user is provided with another transaction identification by the transaction manager upon request by the registered user. Preferably registration of the user occurs prior to the generation of the transaction identification. Preferably registration of the user entails creation of a transaction manager user account, wherein the transaction manager account number is generated and transaction manager information is provided by the user to the transaction manager. Preferably the transaction manager confirms the further transaction information with the user's financial institution.

Preferably the merchant is registered with the transaction manager. Preferably registration of the merchant entails the transaction manager providing the merchant with a merchant identification. Preferably the purchase request sent by the merchant to the transaction manager includes the merchant identification.

Preferably the purchase request includes providing the merchant with the value of the purchase.

Preferably the transaction manager validates the transaction identification by checking that the transaction identification is related to the user's transaction manager account. Preferably the transaction manager account password is provided to authenticate the identity of the user providing the transaction identification. Preferably disabling of the use of the

transaction identification is conducted by removing the relationship between the transaction identification and the user's transaction identification account number. Alternatively, the transaction identification is deleted
5 from the user's transaction manager account information.

Preferably the EFT request to the financial institution is conducted using the credit card or bank account details, the transfer amount (value of the transfer) and the
10 merchant account details sent to the financial institution to transfer the funds according to a standard electronic fund transfer system.

Preferably the financial institution sends an insufficient funds reply if sufficient funds are not present, whereupon the transaction manager sends an insufficient funds reply
15 to the merchant.

In one embodiment the confirmation of the transfer sent
20 from the financial institution to the transfer manager is the same as the confirmation message sent from the transaction manager to the merchant. In another embodiment the confirmations are different.

25 In one embodiment the method of the step of disabling re-use of the transaction identification is provided by the formula for generating the single use transaction identification including an increment in the issue of the other (next) transaction identification. Preferably the
30 method of generating the transaction identification includes providing a check sum digit or character in the transaction identification. Preferably the transaction identification is a number.

35 Preferably confirmation of transfer of funds is sent from the merchant or transaction manager to the user. Preferably this confirmation is sent in the form of an e-

mail message.

Preferably the transaction identification is issued to the user in an on-line environment, such as via the Internet.

5 Alternatively the transaction identification is provided to the user by a telephone interface system. Alternatively the transaction identification is issued to the user by sending the transaction identification to a portable storage device held by the user. Preferably the user can
10 activate transfer of the transaction identification from the portable device to the merchant. Preferably the portable storage device can store a plurality of transaction identifications.

15 Preferably a plurality of transaction identifications may be provided to the user. Preferably the transaction manager manages a plurality of registered users each having a plurality of transaction identifications available for use in making a purchase.

20 Preferably the transaction manager registers a plurality of merchants. Preferably the transaction manager can conduct electronic transfers between a plurality of financial institutions.

25 Also in accordance with the present invention there is provided a method of conducting an on-line transaction including the steps of:

providing a transaction manager;
30 generating a single use transaction identification;
the transaction manager relating the transaction identifier to banking information of a registered user;
providing the registered user with a transaction identification;

35 the user requesting to transfer an amount from a user account to another account, the transfer request including providing the transaction identification and amount to the

transaction manager;

the transaction manager checking the validity of the transaction identification and disabling re-use of the transaction identification;

5 if the transaction identification is valid, sending an EFT request to a financial institution to transfer the amount of funds from the user's account to the other account, the EFT request including the banking information;

10 if sufficient funds are present, the financial institution performing the transfer according to the banking information; and

the transaction manager receiving confirmation of the transfer from the financial institution and sending the
15 confirmation to the user.

In accordance with the present invention there is provided a system for conducting an on-line transaction including:

means for a transaction manager; and
20 means for generating a single use transaction identification;

means for arranged to relate the transaction identifier to banking information of a registered user;

means for providing the registered user with a
25 transaction identification;

means for the user requesting to request to purchase the product or service having a value from a merchant, and providing the transaction identification to the merchant;

means for the merchant to send a payment request to
30 the transaction manager, the payment request including the transaction identification and the value;

means for the transaction manager including means for checking the validity of the transaction identification and disabling re-use of the transaction identification;

35 means for sending an EFT request to a financial institution to transfer the value in funds from the user to the merchant, if the transaction identification is

valid, the EFT request including the banking information;
the transaction manager further including means for
receiving confirmation of the transfer from the financial
institution and sending the confirmation to the merchant.

5

In order to provide a better understanding of the present
invention, a detailed description will be provided of a
preferred embodiment of the present invention, in which:

Figure 1 is a schematic representation of
10 communication between participants of the transaction
system of the present invention;

Figure 2 shows a schematic diagram showing messages
between a user and the transaction manager and an external
organisation or institution in the process of setting up a
15 transaction manager account for the user;

Figure 3 is a schematic representation showing
communication between a merchant and transaction manager
in a process for a merchant to apply for a transaction
manager account;

20 Figure 4 is a schematic representation showing
communication between a financial institution and a
transaction manager in the setting up of an account with
the transaction manager;

Figure 5 is a schematic representation showing
25 communication between a user and a merchant for the
purchase of a product or service;

Figure 6 is a schematic representation showing
communication between a merchant and transaction manager
in the purchase of a product or service;

30 Figure 7 is a schematic representation showing
communication between a transaction manager and a
financial institution or bank in the purchase of a good or
service;

Figure 8 is a schematic representation showing
35 communication between the transaction manager and the user
and the merchant confirming payment of purchase;

Figure 9 is a flow diagram showing steps involved in

the application of an account with the transaction manager; and

Figure 10 is a flow diagram showing steps involved in the process of the user making a purchase.

5

Referring to Figure 1 there is shown a system for conducting financial transactions 10, which includes a transaction manager 12, which is a trusted intermediary that provides services between users 14, e-commerce
10 merchants 16 and financial institutions 18. In particular the transaction manager 12 is an intermediary that each user can trust to conduct electronic transactions on behalf of the user.

15 Users 14 can communicate with a transaction manager 12 over the Internet 20 or another suitable network. Each merchant 16 communicates with the transaction manager 12 via a secure link 24. Each financial institution 18 communicates with the transaction manager 12 via a secure
20 link 22.

Each user 14 must register with the transaction manager 12 whereupon an account is created with the transaction manager 12. Information held by the transaction manager 12
25 in relation to each user is held in confidence and in compliance with privacy laws. To register with the transaction manager 12 the user 14 must provide the user's bank account details including bank account number, account type, credit card number, debit card number,
30 expiry date of each card, credit card limits, along with personal details. The account type may be for example savings account, cheque account, credit card account, debit card account, interest saver account or other types of banking or financial institution account. Each user
35 account created with the transaction manager is provided with a transaction manager account number.

The transaction manager account number may be associated with a transaction manager account alias such as a name, for example "John Doe". Each alias will need to be unique so that no two user aliases can be confused. The user 14
5 may use the alias to refer to the transaction manager account rather than the account number. The transaction manager account number is related or mapped to the bank account details including the user's bank account number or credit card/debit card number and kept secure. One of
10 the key advantages of the present invention is that the user details including the user's bank account need not use the credit card number to conduct financial transactions.

15 A transaction manager account expiry date is provided to the account, which is a date on which the transaction manager account will cease to be operational.

A transaction manager account password is an optional
20 feature that may be included that provides an additional level of security before the transaction manager will process a transaction. This will be described in further detail below.

25 A plurality of transaction managers 12 may be provided. A financial institution may be licensed to operate as a transaction manager 12. Transaction managers 12 may be geographically located to support a particular region according to, for example a licensing agreement.

30 Transaction managers 12 may communicate with one another to process payments. Thus a single transaction manager account number can be used for any account of any financial institution registered with one of the transaction managers 18.

35 Financial institution 18 may be for example a bank, a credit society, a credit union, building society or any

other suitable form of financial institution which have accounts within which users can deposit money and the money being able to be electronically transferred from their account.

5

A merchant 16 is a person or entity that uses an on-line site, such as an Internet site, to do business with users 14. Merchants 16 register with the transaction manager 12 to use the facility provided by the present invention. The registration process ensures that an e-commerce merchant site is a secure site and that Internet clients are assured of this certification by the transaction manager 12. The transaction manager 12 will maintain a database of registered e-commerce merchants 16. The e-commerce merchant 16 also requires a bank account with a financial institution 18 in order to receive payments. The transaction manager 12 as the intermediary is trusted by the user to process payments from the user 14 and ensure they go to the correct merchant 16, only when appropriately authorised by the user 14.

Cooperation is required between the transaction manager 12 and the financial institution 18 of the user 14 to enable funds to be transferred at the direction of the transaction manager 12. The transaction manager account is issued to a customer on the basis of understanding between transfer manager 12 and the financial institution 18. The transaction manager 12 is responsible for security to Internet users 14 carrying out their business to customer transaction.

Referring to Figure 2, there is shown a communication process 26 for the registration of a user 14 with the transaction manager 12. A user 14 sends a registration request to the transaction manager website and requests an account. Along with the request for the transaction manager account, necessary information for the transaction

manager to create the account (such as the personal details of the user and banking details of the user with their financial institution 18) is sent to the transaction manager 12.

5

The transaction manager 12 acknowledges the application and provided the user 14 meets the transaction manager's criteria requests that the financial institution 18 validate the application. Financial institution 18 either
10 accepts or rejects the validation. The transaction manager 12 then either approves or disapproves of the application for registration and sends the appropriate response to the user 14.

15 A user 14 may have more than one financial institution account linked to the transaction manager account. In this case the user 14 provides all the banking information required for the additional accounts. Typically one financial institution's account will be nominated as a
20 primary account.

In order to undertake a financial transaction the user 14 must then request at least one transaction identification number. For each transaction that the user 14 wishes to
25 make a request must be made for a transaction identification number or a request for multiple transaction identification numbers must be made. The user 14 need not do this straight away. The user 14 may request additional transaction identification numbers at any
30 stage.

If the user has more than one financial institution account related to the transaction manager account, the financial institution account used in the transaction
35 needs to be specified. This can occur at the time the transaction identifier is issued, so that the request for the transaction identifier includes nomination of the

financial institution account, thus use of the transaction identifier will result in the nominated financial institution account being used. However the preferred option is to allow the user to choose the account at the
5 time of purchase. This method will be described in more detail below.

If the user 14 decides to make a purchase then they send a request for a transaction identification number to the
10 transaction manager 12. The transaction manager 12 then provides the requested number of transaction identification numbers to the user 14. The transaction identification number is provided to a merchant 16 to undertake a purchase of a product or service. A
15 transaction cannot take place until a transaction identification number is issued. The issuing of a transaction identification number is therefore a necessary step in the processing of a transaction.

20 The transaction identification number will be sent by the merchant 16 to the transaction manager 12. The transaction identification number is then used by the transaction manager 12 to identify the user 14 and thereby look up the user's account to obtain the necessary information to then
25 conduct the financial transaction. The transaction identification number is a single use number given in confidence to the user 14. Once a transaction identification number is used it is not able to be used again. The association/mapping between the transaction
30 identification number and the user's transaction manager account is made no longer active. The transaction identification number needs to be distinguished from a number that may be generated by for example an EFTPOS terminal for tracking financial transaction. It also needs
35 to be distinguished from a credit card number that a user provides to a merchant which then can be re-used.

The transaction identification number can be a randomly generated number or it may be generated by a formula, such as a sequentially generated number. It may include a checksum or validation digit/s. Further, it may also be
5 part random and part generated by a formula.

If the user has more than one financial institution account additional details may need to be entered to identify the account the user wishes to use. An example is
10 below:

When the user 14 makes a purchase they enter

Account number
15 Transaction ID
PIN
Account Type (2 characters max)

Should the user 14 have more than one nominated financial
20 institution account, they can leave Account Type null, in which case the transaction is assumed to be using their primary nominated financial institution account.

The account type code can be left null, or have 1 or 2
25 characters.

Codes are typically

S = savings
30 C = cheque
H = homesaver
V = visa
A = american express
M = master card

35 Should they only have one nominated financial account they leave the account type null.

Should they have more than 1 nominated financial account,
for example a savings and a visa, and they wanted to use
their savings account they would enter S for the account
5 type.

If they have more than 1 Visa card (credit card) or more
than 1 savings account that has been specified as a
nominated financial account the second account type
10 character comes in. For example, if they want to use their
2nd Visa card they would specify V2 for their account type.

Users need to be informed of their account type codes when
the transaction manager account is approved or if the
15 transaction manager account has been modified by adding an
additional nominated financial institution account.

Referring to Figure 3, a communication process 28 for a
merchant 16 registering with the transaction manager 12 is
20 shown. Merchant 16 offers its products or services on-line
and to register to use the present invention must request
an account with the transaction manager 12. A request
along with the appropriate details of the merchant 16,
including details of the bank account into which transfers
25 are to be made are provided in a request to the
transaction manager 12. The transaction manager 12
acknowledges the application. Provided that the merchant
16 has a sufficiently secure website and other meets any
other terms and conditions the transaction manager 12 then
30 requests validation of the merchant's banking details with
the merchant's financial institution 18. The financial
institution 18 either accepts or rejects the validation.
The transaction manager will then in turn approve or
disapprove the merchant's application. If the application

is approved the merchant 16 will be provided with a merchant identification number. The merchant identification number is used to identify the merchant 16 to the transaction manager 12. The transaction manager 12
5 is then able to look up the banking details of the merchant so that the funds can be deposited in the merchant's bank account.

Referring to Figure 4, the financial institution 18' may
10 also required to register with the transaction manager 12 in order to ensure that appropriate services are provided by the financial institution 18' to conduct the present invention and as a security measure for identifying the
15 financial institution 18', thereby ensuring it is not a hacker. Registration is also requested of the financial institution 18' in order to be licensed to operate as another transaction manager. The communication process here is shown as 30. The financial institution 18' requests an account and provides details to a transaction manager:
20 The transaction manager 12 acknowledges the application to the final institution and requests validation with other financial institutions or organisations 18. If the above organisations or institutions 18 accept or reject the application the transaction manager 12 then forwards an
25 approval or disapproval of the application to the applicant financial institution 18'.

Referring to Figure 5, after the user has obtained a transaction identification number the transaction manager
30 12 is then able to undertake communication process 32. The user selects an item for purchase from the merchant 16. The user 12 decides to make a payment to the merchant and releases to the merchant the transaction identification number and other information required. Other information
35 required may include selection of an account type, a password, transaction limit, an override password or other necessary information.

Referring then to Figure 6, which shows communication process 34. The merchant 16 sends the transaction identification number and other details over the secure link 24 to the transaction manager 12. The transaction manager 12 then accesses the user's transaction manager account 36 using the transaction identification number, which also checks whether the transaction identification is valid. Matching the transaction identification number with the user's account 36 enables the transaction manager 12 to look up and obtain the banking information in the user's account 36.

Referring to Figure 7, which shows communication process 38. The banking information of the user is then sent in the form of a secure financial information to the financial institution 18 including the bank account details/credit card details to the financial institution 18. The financial institution 18 then checks the user's financial account information/credit card number in the user's financial institution account 40 to confirm the validation of those details and check that sufficient funds are available in the user's bank account 40. The final institution 18 then notifies the transaction manager 12 of the validation status and whether it is accepted or rejected.

The amount is transferred from the user's account 40 to the merchant's account.

30

Referring to Figure 8, which shows the communication process 42. The user is that the transaction manager 12 sends the merchant by secure link 24 the status of the transaction and whether it is accepted. If it is accepted a transaction tracking number is provided to the merchant 16. The transaction manager 12 also notifies the user 14 that the secure transaction has been processed. This may

be by e-mail, for example. The transaction manager 12 also updates financial information in the merchant's transaction manager account 44 along with providing an audit trail and updates the financial information in the user's transaction manager account 36 along with audit trail information.

Referring back to Figure 5, the merchant 16 confirms that the purchase has occurred and then provides the goods or service to the user 14.

Referring to Figure 9, flow diagram 50 shows steps for the user applying for an account with the transaction manager. The process starts at 52 with application for an account with the transaction manager being made by the user at 54. The user submits personal information for the application at 56 including banking details. At 58 the transaction manager acknowledges to the user the application and sends the information to the relevant organisation or financial institution for accreditations. Other organisations may include credit rating organisations.

At 60 the other organisation or financial institution validates information sent by the transaction manager. At 62 the other organisation or financial institution advises the transaction manager of the validation status. At 64 the transaction manager determines the status of the application according to the validation status from the organisation or financial institution and other criteria that may be applied by the transaction manager and advises the user of the status of his or her application. At 66 the user then receives notification of his or her application whereupon the process ends at 68.

Referring to Figure 10 a process 80 is shown with the user making a purchase payment for an item. The process starts at 82. At 84 the user submits a request for a transaction

identification number to the transaction manager. At 86 the transaction manager receives the request for the transaction identification number and performs a validation of the user's account, including whether the user has an account and whether the account is active. The user making the request also provides either their account number or their account alias to the transaction manager to identify the user. The transaction manager account password may be required to authenticate the identity of the user. A check is performed at 88 of the validity of the user's account. If rejected the process returns to the start at 82. If accepted the process moves to 90. The transaction manager approves the request and supplies the user with one or more transaction identification numbers.

The transaction identification numbers may be provided on a screen for the user to print out if the request is conducted on-line or maybe verbally provided to the user if the request is conducted over the telephone or they may be electronically transferred to a storage device for storing the transfer identification numbers. Further alternatives for delivering the transaction identification number/s include using the postal service to deliver a printed list of number/s or a card having a silver latex layer covering the number/s, which may be removed by scratching similar to instant lottery tickets.

The user may then leave the transaction manager's website, hang up or disconnect the storage device. The user may also request a limit be placed on transactions. A limit may be provided by default. The value of the limit may be modified by the user. If a transaction value is above the limit it will be rejected as explained in more detail below. The user may have a special reason for overriding the normal transaction limit. In this case an override password is stored in the user's transaction manager account. Overriding the limit is described below.

At a later time the user may visit a merchant's electronic commerce shop site on-line at 92. The user selects an item for purchase from the merchant's website at 94. Selection
5 of an item may indicate the price or the user may be required to enter the price in a checkout form. The checkout form is required by the transaction manager to be an encrypted form when sent between the merchant and the user's computer. The user enters one transaction
10 identification number to the checkout form submitted to the merchant. This may be by typing in the number into a form or by a storage device entering the transaction identification number into the form or transferring it in some other suitable manner. If the value of the
15 transaction will be above the transaction limit, the user may enter the override password. This information is sent by secure encrypted submission from the user to the merchant.

20 At 98 the merchant acknowledges the secure financial transaction to the user. At 100 the merchant then submits a secure financial transaction request to the transaction manager. This request will include the transaction identification number, the amount of the purchase, the
25 merchant's identification and the override password, if applicable. At 102 the transaction manager validates the secure financial transaction request. If the value is over the transaction limit it will be rejected unless the override password is provided. The check is performed at
30 104, and if rejected such as by the transaction identification number not being valid or the merchant's identification not being valid as the transaction value being over the limit, the process is returned to step 98. If accepted, at 106 the transaction manager looks up the
35 user's transaction manager account to find the bank account details stored in the user's transaction manager account and looks up the merchant's banking details. These

are then sent at 108 in an electronic fund transfer (EFT) request to the financial institution. The financial institution validates the financial transaction request at 110 and if the validation is rejected, returns a rejection message to the transaction manager which will then reject the transaction and return the process to 98. If the financial institution accepts the EFT request the process moves to 112 where the financial institution transfers funds from the user's account to the merchant's account according to the details provided by the transaction manager. The financial institution then provides a tracking number to the transaction manager at 114. At 116 the transaction manager then informs the manager of the transaction approval and provides the tracking number to the merchant. At 118 the transaction manager informs the user of the successful transaction, preferably by e-mail. At 120 the merchants ships the goods to the user and in one embodiment also confirms with the user that the transaction has been completed. The process then ends at 122.

The merchant is able to access account history with the transaction manager by details stored in the merchant's transaction manager account 44. The user is also able to access transaction history from the user's transaction manager account 36.

The present invention may also be used to transfer money between two or more user accounts or a user account and other person's or entity's account. The recipient must be a transaction manager account holder. A fund transfer request can be initiated by a transaction manager account holder. The transaction manager receiving this fund transfer request will then relay this request to the relevant transaction manager within the transaction manager business network. This transaction manager will then process this fund transfer request and the recipient

transaction manager account will be credited.

5 The present invention clearly provides an advantage in
that the user is not providing their credit card or other
details to the merchant. Instead, they are providing a
transaction identification number which is a single use
number. Furthermore, if the transaction requires an amount
greater than the predefined limit applied to the
transaction identification number/s but provided that the
10 amount is within the limits of the user's credit limit
with their financial institution the user may override the
transaction limit by providing a password as part of the
transaction process. In addition, the transaction manager
operates as more than just a clearing house in that it is
15 an organisation trusted by the user that conducts the
electronic fund transfer with the financial institution.

Due to transaction identification numbers being single use
the user has peace of mind in that they do not have to be
20 concerned with the merchant keeping a copy of the
transaction identification number as it will not be
useable again. This is unlike a credit card number which
may be re-used or potentially fall into the wrong hands.

25 Modifications and variations may be made to the present
invention without departing from the basic inventive
concept. Such modifications are intended to fall within
the scope of the present invention, the nature of which
are to be determined from the foregoing description.

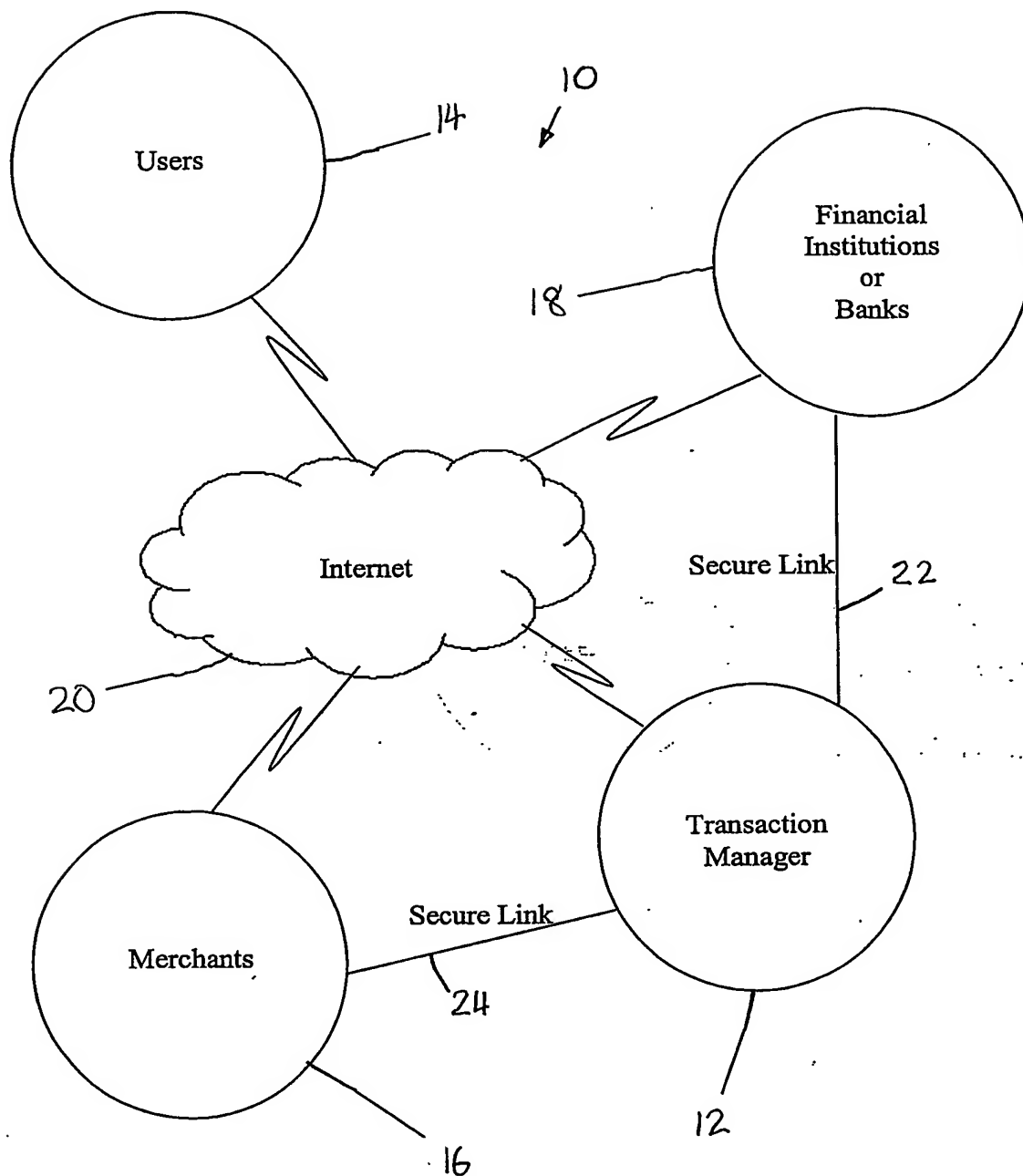


FIG. 1

Figure 2

shows the link between a User
and a Transaction Manager during the Application for an Account.

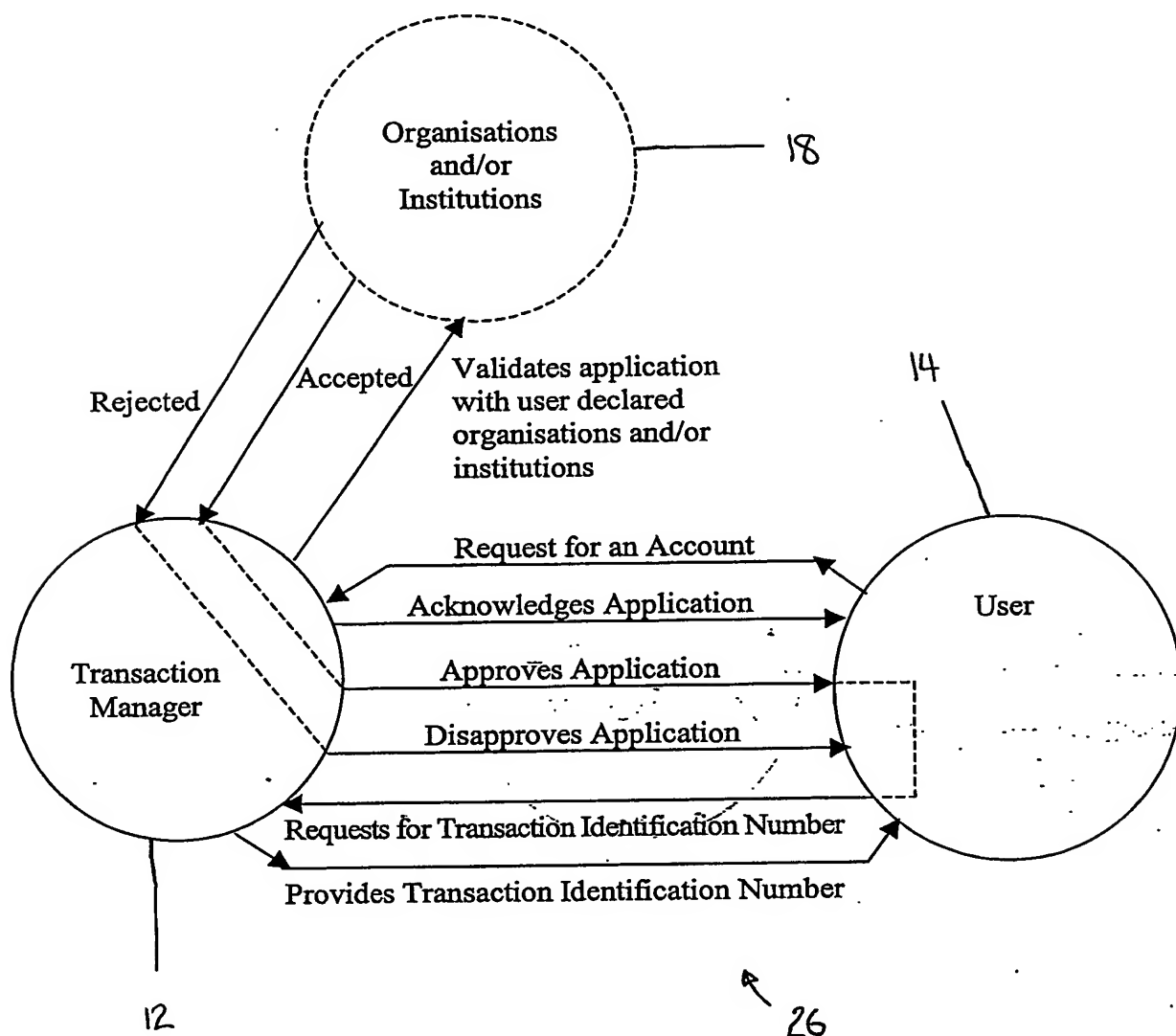


FIG. 2

Figure 3

shows the link between a Merchant and a Transaction Manager during the Application for an Account.

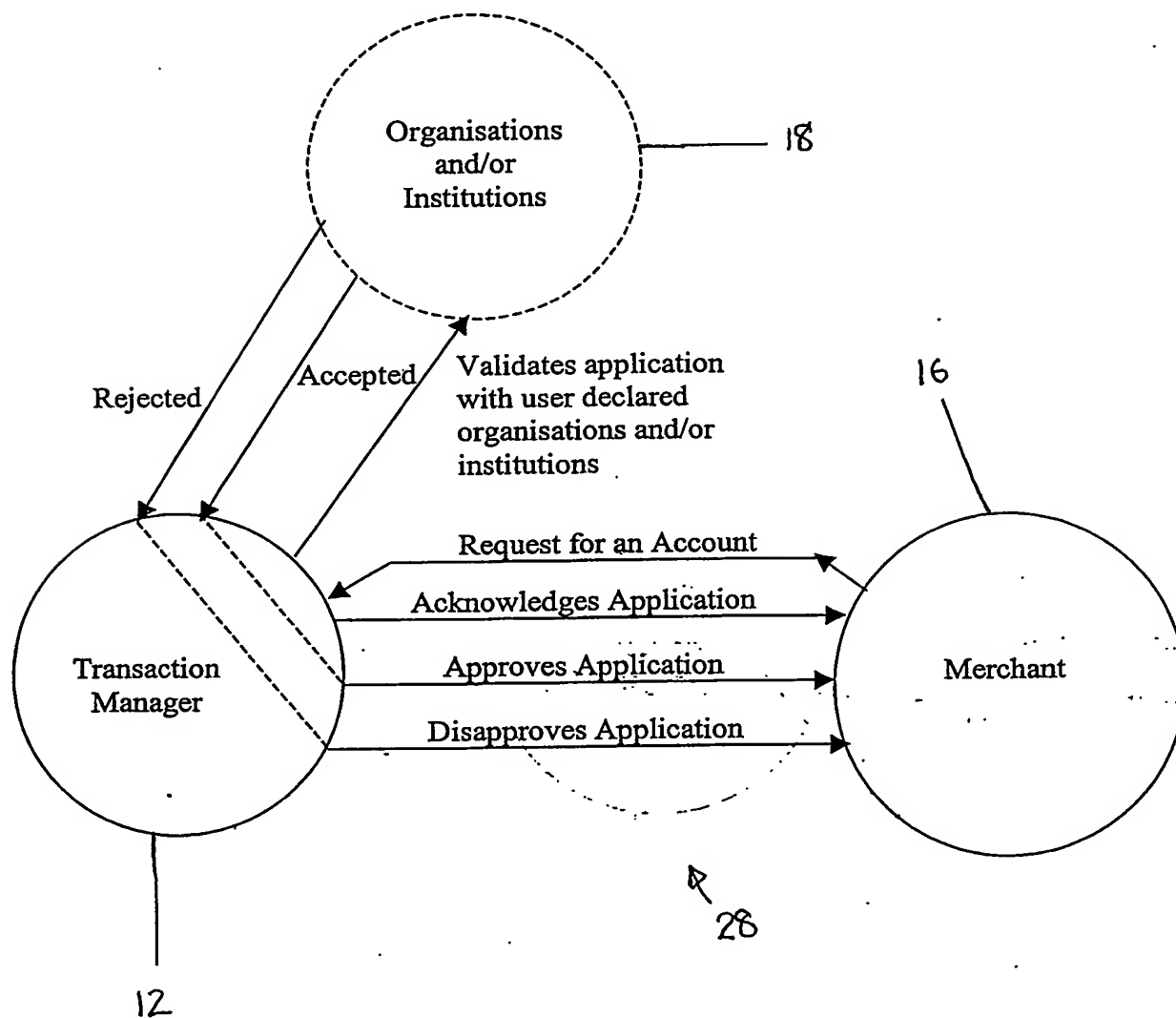


FIG. 3

Figure 4 shows the link between a Financial Institution or Bank and a Transaction Manager during the Application for an Account.

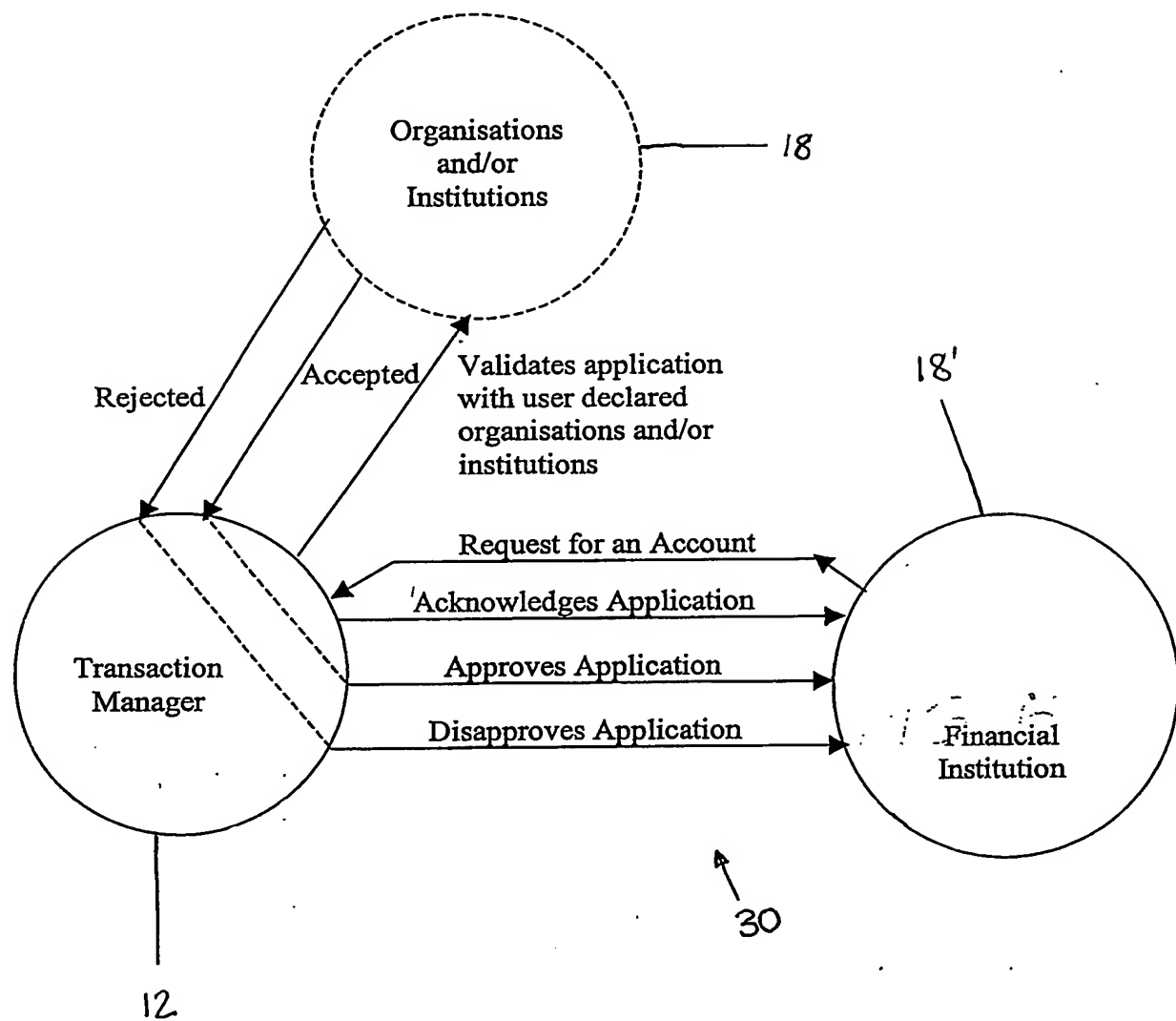


FIG. 4

Figure 5 shows
made a purchase

the link between a user and a merchant when a user

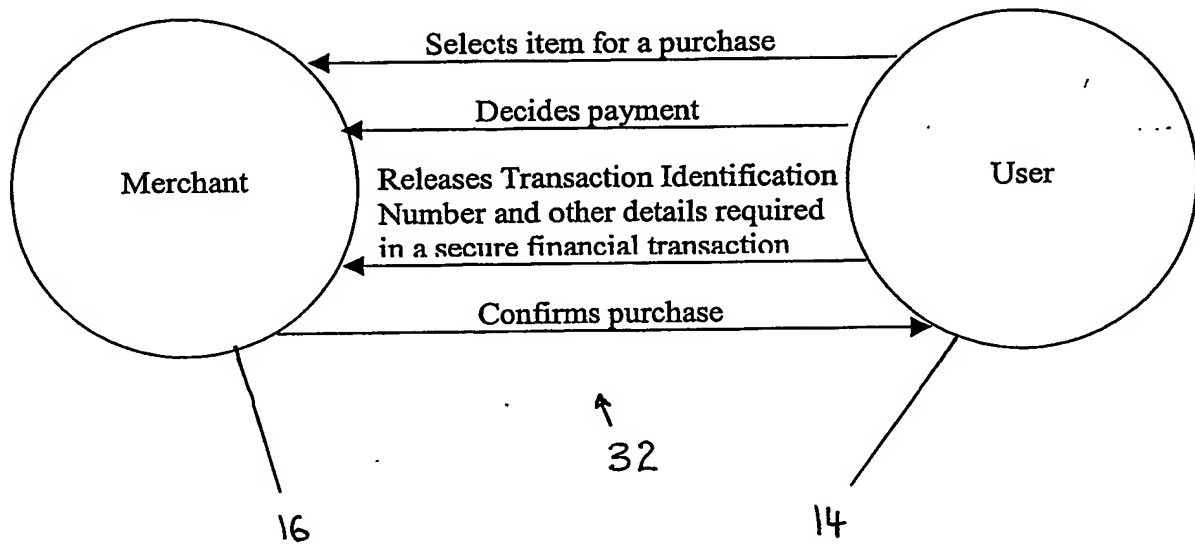


FIG. 5

Figure 6 shows
the link between a Merchant and a Transaction
Manager

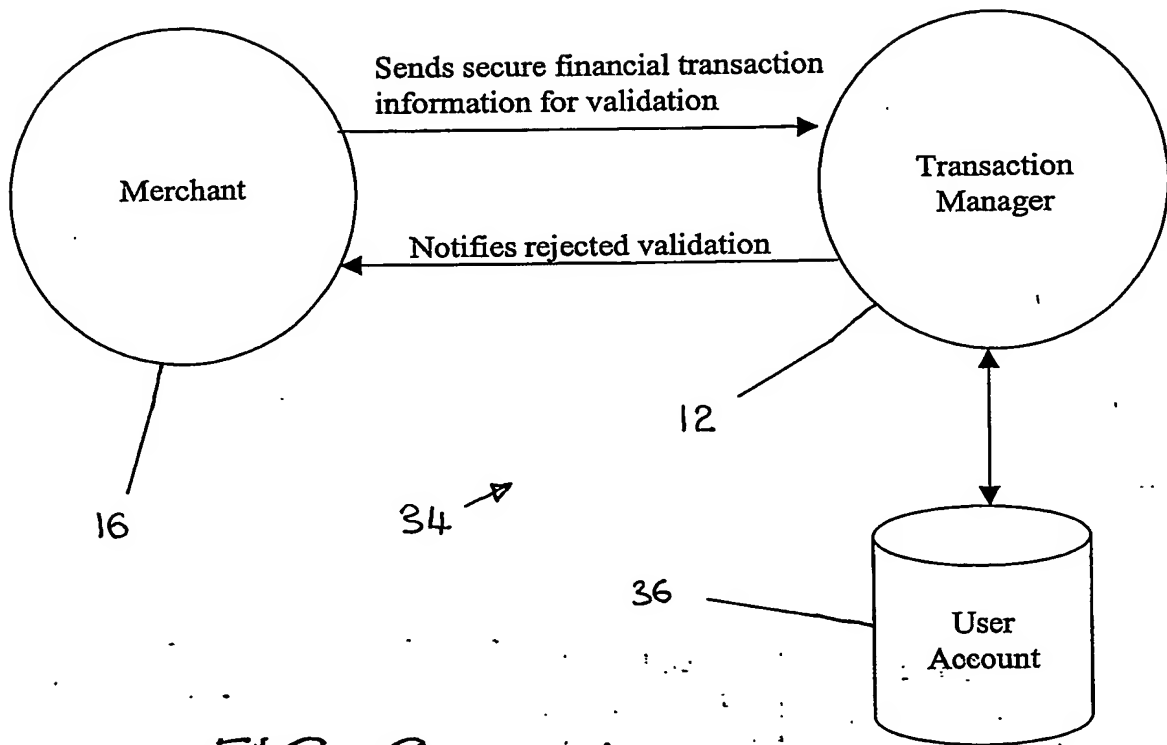


FIG. 6

- Confirms validation status
- Audit Trails

Figure 7 shows
Financial Institution or Bank

the link between a Transaction Manager and a

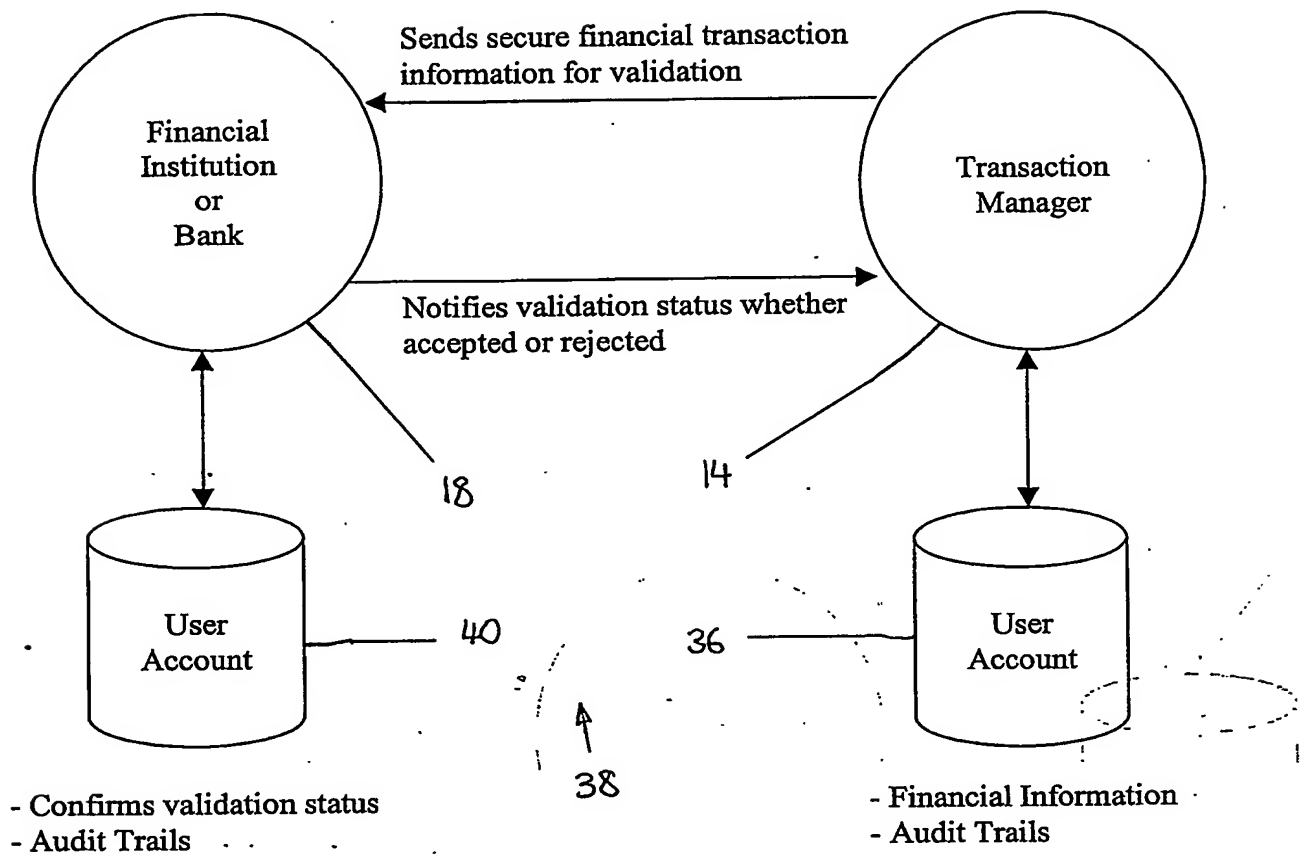


FIG. 7

Figure 8 shows the link connecting a Transaction Manager, a Merchant and a User

the link connecting a Transaction Manager, a Merchant and a User

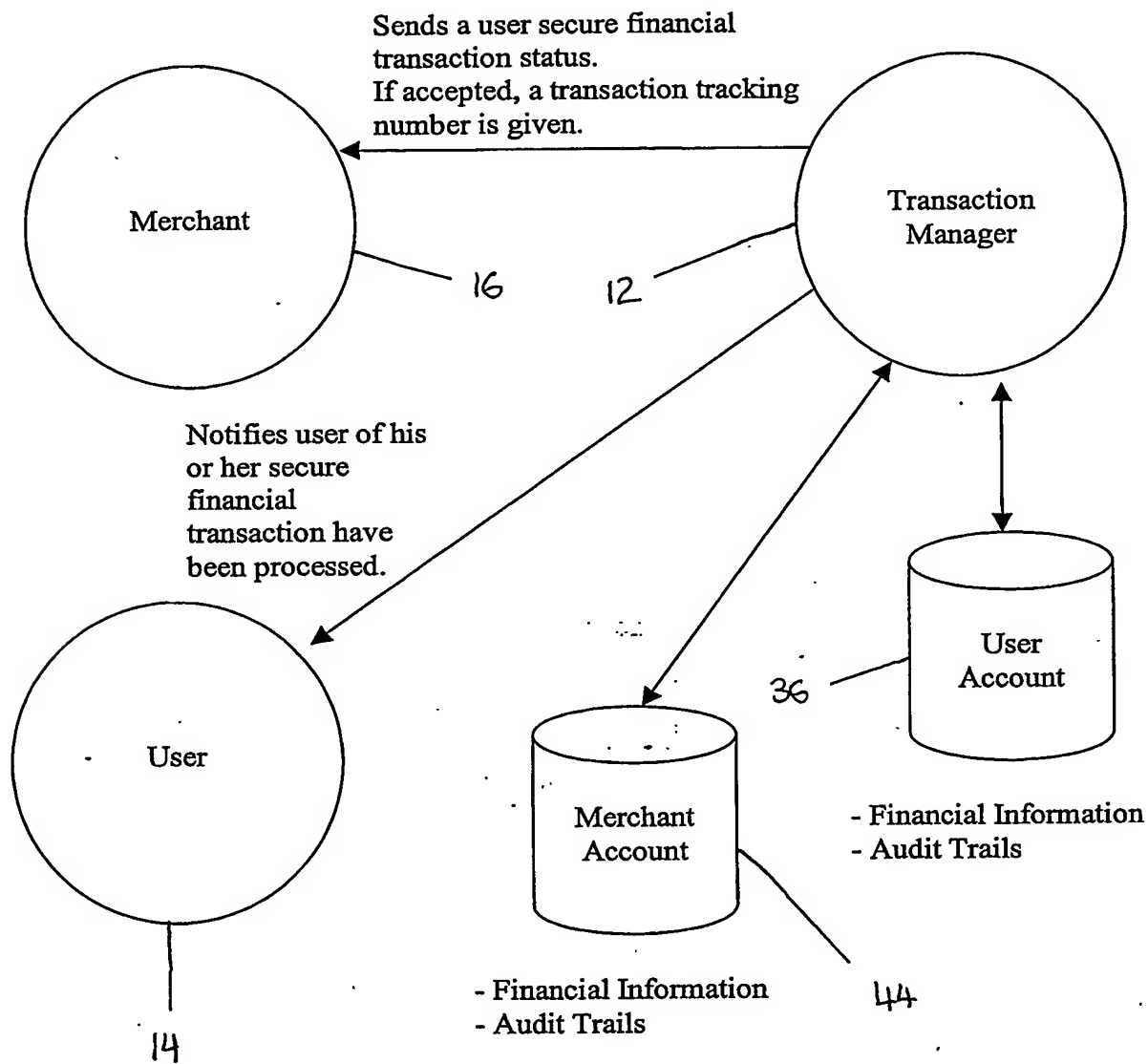


FIG. 8

Figure 9 shows the Flow Diagram of a User applying for an account with a Transaction Manager.

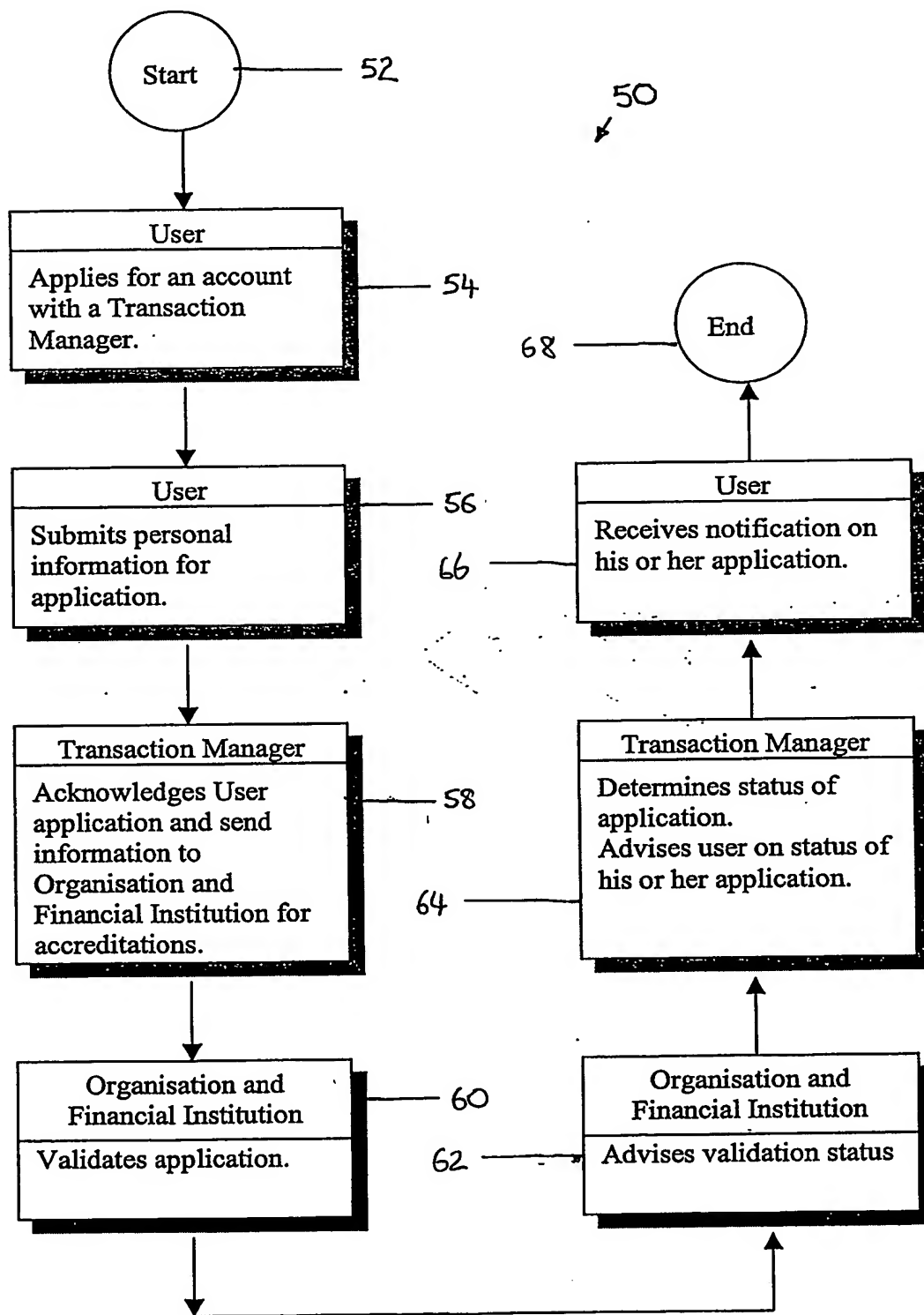


FIG. 9

Figure 10 shows the Flow Diagram of a User making a purchase and paying for the item(s).

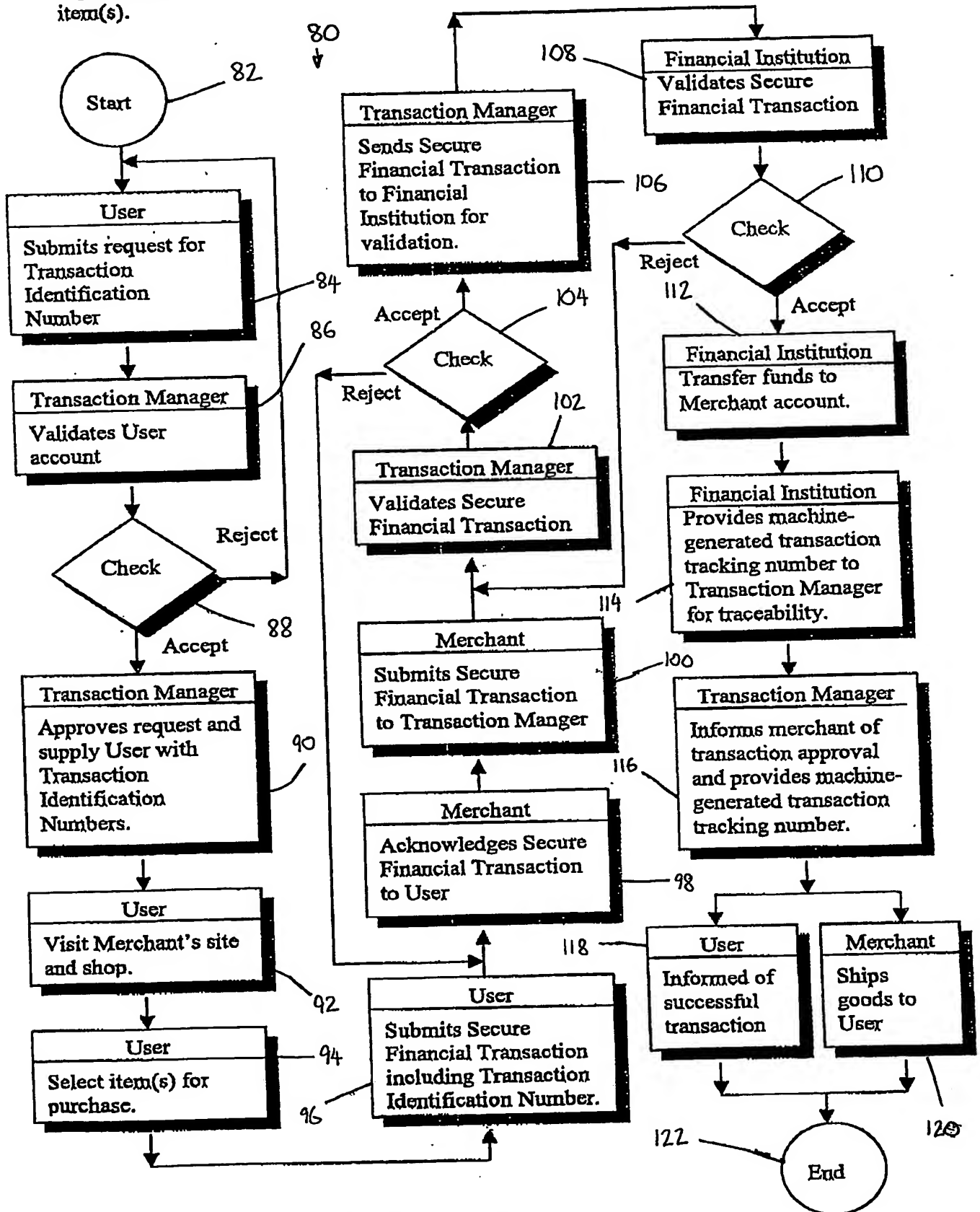


FIG. 10

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